

REMARKS

This communication responds to the Final Office Action dated July 9, 2010.

Claim 9 is amended and no claims are cancelled or added by this Response. Claims 1-9 remain pending in this Patent Application.

The Rejection of Claims Under § 103

Claim 9 was rejected under 35 U.S.C. § 103(a) as being obvious over Smith (U.S. 2005/0140610) in view of Nimmer (U.S. Patent No. 6,980,182). Claim 9 includes an amendment to clarify certain aspects of the present subject matter. An example of support for the amendment can be found in the Application on page 25 lines 1-9 and in Fig. 5b. Thus, no new matter has been added.

Applicant respectfully traverses the rejection. A proper *prima facie* case of obviousness does not presently exist for claim 9 because Smith and Nimmer do not provide each and every element of the claim.

For example, Applicant cannot find in the cited portions of Smith and Nimmer, among other things,

dividing the summed current between a plurality of row electrodes such that each row has a respective divided current, the ratio of said divided current being controlled by a controllable current mirror.

The Office Action states that this is shown in Fig. 5 of Smith where the current input line 526 is controlled by the size of transistors 522 and 524. However, the sizes of transistors 522, 524 and the control signals on transistors 528, 530, and 532 merely affect the initially supplied current to current input line 526. The current input line 526 in Smith is the current to be divided, and is not the divided current. Thus, the Office Action does not give proper weight to (or disregards) the language *dividing the summed current between a plurality of row electrodes such that each row has a respective divided current*.

To clarify the difference and further prosecution, claim 9 is amended to recite *the ratio of a said respective divided current in a first said row electrode to a said respective divided current in a second row electrode being controlled by a controllable current mirror*. Applicant

respectfully submits that the recited ratio of divided current is not obvious in view of Smith and Nimmer.

Further, Applicant cannot find in the cited portions of Smith and Nimmer
the ratio of a said respective divided currents in a first said row electrode to a said respective divided current in a second said row electrode being controlled by a controllable current mirror outputting a signal to control said first row electrode on the basis of said respective divided current in said second row electrode and an applied ratio control signal,

as presently recited in claim 9.

The Office Action includes two similar interpretations of how claim 9 is obvious in view of a combination of Smith and Nimmer. In the first interpretation, the Office Action notes that Smith does not disclose simultaneously driving plurality of row electrodes and a plurality of column electrodes, but the Office Action asserts on page 4 that this is found in Nimmer.

However, the currents in Nimmer (as noted in the Office Action) are dispersed across multiple electrodes merely according to Kirchoff's current law instead of according to controllable current mirrors. Thus, the currents in respective rows are not influenced by anything other than Kirchoff's current law, and the combination of Smith with Nimmer does not establish
the ratio of a said respective divided currents in a first said row electrode to a said respective divided current in a second row electrode being controlled by a controllable current mirror.

Furthermore, in regard to the Office Action's comment that Smith states that the functions of the column circuitry and row driver circuitry may be exchanged, such an exchange would not arrive at the subject matter of the claims, especially regarding *the current mirror outputting a signal to control said first row electrode on the basis of said respective divided current in said second row electrode and an applied ratio control signal.*

Therefore, the combination of Smith with Nimmer does not provide each and every element of claim 9.

In regard to the Office Action's alternate interpretation of claim 9, the Office Action notes that Smith does not disclose simultaneously driving the plurality of row electrodes at the same time as the driving of the plurality of column electrodes, and that Smith does not disclose that a sum of column currents is divided between multiple row electrodes.

Additionally, as indicated above, Smith also does not disclose *the ratio of a said respective divided currents in a first said row electrode to a said respective divided current in a second row electrode being controlled by a controllable current mirror*, nor disclose a ratio of one row current to another *being controlled by a controllable current mirror outputting a signal to control said first row electrode on the basis of said respective divided current in said second row electrode and an applied ratio control signal*.

Regarding *dividing the summed current between a plurality of row electrodes such that each row has a respective divided current* recited in the claim, the Office Action asserts on page 6 that this is found in Nimmer. As set forth above however, the Office Action states that the currents are dispersed across multiple electrodes merely according to Kirchoff's current law instead of according to controllable current mirrors. Thus, the currents in respective rows are not influenced by anything other than Kirchoff's current law, and Smith with Nimmer does not establish *the ratio of a said respective divided currents in a first said row electrode to a said respective divided current in a second row electrode being controlled by a controllable current mirror*. In fact, in its alternate interpretation analysis, the Office Action does not mention control of the ratio of currents as recited in the claims.

Therefore, the combination of Smith with Nimmer does not provide each every element of claim 9 according to either of the Office Action's interpretations of claim 9. Accordingly, withdrawal of the rejection and allowance of claim 9 is respectfully requested.

Allowable Subject Matter

Claims 1-8 were allowed. Applicant acknowledges the allowed subject matter with appreciation.

Reservation of Rights

In the interest of clarity and brevity, every assertion made in the Office Action may not have been addressed. Silence regarding any such assertion does not constitute any admission or acquiescence. All rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections,

the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference, are reserved. It is not admitted that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, timely objection to such reliance on Official Notice is made, and all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03, are reserved. All rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04, are likewise reserved.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the undersigned at (612) 371-2172 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No.19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 9th day of November, 2010.

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